



Energy Future System Operator

Response form

The consultation is available at: <https://www.gov.uk/government/consultations/proposals-for-a-future-system-operator-role>

The closing date for responses is 28th September 2021

Please return completed forms to:

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AND

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Office of Gas and Electricity Markets
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Personal / Confidential information

Please be aware that we intend to publish a summary of all responses to this consultation.

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

Ofgem will publish non-confidential responses (or parts of response) on its website. If you want your response in whole or in part to be considered confidential, please tell us in your response and say why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

Please be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our privacy policy.

All responses will be processed by BEIS and Ofgem as this is a joint consultation.

We will summarise all responses and publish this summary on GOV.UK. The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

I want my response to be treated as confidential ☐

Comments: [Click here to enter text.](#)

About You

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	Respondent type
<input type="checkbox"/>	Business representative organisation/trade body
<input type="checkbox"/>	Central government
<input type="checkbox"/>	Charity or social enterprise
<input type="checkbox"/>	Individual
<input checked="" type="checkbox"/>	Large business (over 250 staff)
<input type="checkbox"/>	Legal representative
<input type="checkbox"/>	Local government
<input type="checkbox"/>	Medium business (50 to 250 staff)
<input type="checkbox"/>	Micro business (up to 9 staff)
<input type="checkbox"/>	Small business (10 to 49 staff)
<input type="checkbox"/>	Trade union or staff association
<input type="checkbox"/>	Other (please describe)

Questions

Chapter 2

Questions in this section relate to

- The case for change

Question 1

Do you agree that net zero will create the need for new technical roles in the electricity and gas systems, and require a new approach to for energy system governance?

A ☒ **Yes** ☐ **No**

B

If not please explain why:

We agree with the general statement that there will need to be new technical roles created, but we are concerned that current reforms and improvements to markets and wider industry could be delayed whilst the FSO is being created. There will be areas where the current system operators are able to make incremental improvements immediately and these areas should not be deprioritised.

The ESO currently is unable to think through whole system implications as they do not have the scope, visibility or resources to do so. The new FSO should have this greater scope and visibility.

In order to achieve the transition to net-zero it will be crucial to create the right regulatory environment to support investment. This will mean ensuring a 'whole system approach' is taken when calculating the impact of necessary regulatory change This will provide greater confidence to investors through greater predictability of regulatory reform.

Question 2

Do you agree that the establishment of a Future System Operator is needed to fulfil the kinds of technical roles needed to drive net zero?

A ☒ **Yes** ☐ **No**

B

If not please explain why:

There are benefits to combining system operations between fuels but we do not believe that the new technical roles in themselves necessitate a new system operator. There is a significant risk that the roles are not implemented across the whole system and internal silos appear within the FSO. This could create a similar system to today but at greater cost due to the transition. Once again, the impact on investment is a crucial consideration.

Question 3

Do you agree that a Future System Operator should have roles in both the electricity and gas systems?

A ☒ **Yes** ☐ **No**

B There is significant potential to merge markets, create effective cross-subsidies to drive Net Zero and more effective Use of System signals. A 'whole system' approach to regulatory change is necessary.

If not please explain why:

We are however concerned that the smaller size of the gas system operator role will be lost within the FSO, with more emphasis and resources dedicated to electricity system operator roles and thus, strategic work towards Net Zero will reflect the electricity system's future more at the cost of the needs to the current gas system. It is vital that the gas system operator has a clear voice within the FSO. If the gas side of the FSO cannot be given the appropriate level of attention and weight then it may be more appropriate to keep the functions of the gas SO separate from the FSO framework to ensure that sufficient focus is given to gas in the planning process. Needless to say, if a separate gas SO is maintained it will need to work closely with the FSO and the FSO itself will need to ensure it has significant knowledge of the gas system.

Question 4

Do you agree that a Future System Operator should be entirely separate from National Grid plc?

A

☒ Yes

☐ No

B It is vital that the new System Operator should be fully independent from all energy sector interests and independent from shareholder and political influence. If there is any connection to National Grid Group, or any other energy sector body, including interconnected markets, a conflict of interest will remain. This includes requiring suitable separation from Code Management – the FSO should have an advisory, rather than decision-making role in prioritising industry change.

If not please explain why:

[Click here to enter text.](#)

Question 5

What issues are there with existing institutional arrangements in the UK energy system in relation to system-wide decision-making and planning?

Please provide your answer below:

There needs to be a clear strategic direction for the energy system but it is not clear who that is responsible for setting this direction. Government policy tends to be light on detail, often misses deadlines for publication and does not always provide new information. For example, the Energy White Paper was delayed from 2019 and instead a series of isolated consultations were undertaken. The Hydrogen Strategy Paper contained little new information and so did not provide investors with confidence or industry with a clear direction of travel. We understand that the industry is facing a period of great and rapid change towards Net Zero, but we need Government and Ofgem to make clear and lasting policy decisions to provide investment certainty.

The ESO does important work to support system-wide planning in the Future Energy Scenarios (FES) and they form the basis of useful discussions and Impact Assessments but they are not (and should not be treated) as predictions. It was concluded in the Cost of Energy Review by Dieter Helm in 2017 that government is poor at 'picking winners' when it comes to specific technologies but that market reform should be looked at to provide a clearer signal. That sort of deep reform should not come from within industry, it should be led by a body with the power to implement change, which has not happened to date. It is

not apparent to us how Government and Ofgem engage in that process and consider FES in their policymaking decisions.

There is a considerable churn of Ofgem staff in any given year and those that remain do tend to move to different areas within Ofgem quite regularly – and this has been the case for many years - meaning historical knowledge is lost. The effect of this churn can be seen in the code modification work. It is not uncommon for Code Modifications to reference previous Mods and for Workgroups to have members who participated in those discussions, yet Ofgem requires more time to reconsider their decision. Ofgem are heavily resource bound – a frequent issue raised is the lack of Ofgem presence within open government, including key Mods such as CMP317/327. As Ofgem did not witness, or participate in, those discussions, they have to start from the beginning when the Final Modification Report is submitted. For example, CMP343 is in response to Ofgem's Direction resulting from the Target Charging Review, suggesting that Ofgem should already have a position. The ESO did analysis to support the workgroup and kept the modification moving as Code Admin. The Final Modification Report was delivered to Ofgem in October 2020; Ofgem did not have a decision by the date they themselves set (27th August 2021) and can give no indication of when a decision can be expected. The finished modification has been with Ofgem for nearly a year, on a 'decision' that was made in November 2019.

We have concerns that Ofgem does not have a full resource or understanding of the industry to fulfil its existing role.

Question 6

What examples/case studies are you aware of where net zero delivery in one part of the energy system did not adequately account for cross-system impacts or costs?

Please provide your answer below:

We believe it is vital that the FSO and strategic thinking does not give carbon (in order to reach Net Zero) more weight than is justified. The UK has a functioning carbon market, with Carbon Price Support to give the price at a meaningful value, which means the carbon becomes internalised in investment decisions. If the FSO and/or the Strategic Direction take carbon directly into account as well, there is a real risk of double-counting the cost of carbon and distorting the incentive delivered by carbon market. In such a scenario the FSO would be encouraging some technologies or user types beyond the force of the carbon market, essentially 'picking winners' – which is something the ESO has been (rightly) at pains to avoid. The carbon market is functioning correctly and delivering a market price, it is not for the FSO to make further adjustments.

Question 7

Where should government focus in our efforts to improve systems thinking and coordination across the energy system?

Please provide your answer below:

It is vital that there is transparency as multiple fuels come together and that decisions are seen to be independent. Government must be able to take a holistic understanding of the how the industry operates and support it. Investors need to see evidence of whole system thinking in regulatory change so that there is a degree of predictability in regulatory design to support long term investment. In addition, evidence of close alignment between Government policy and regulatory policy is needed. For example, in the recent change to the gas transmission short-haul tariff industry received different perspectives and viewpoints between BEIS and Ofgem and it was not clear how the net zero transition was put at the forefront of this decision making.

It is important to remember that the carbon market in the UK covers both fuels and so already ties investment in the electricity and gas systems together. The cost of carbon is internalised via the carbon market and investors already take it into account. If the FSO is given an obligation to consider carbon separately, on top of the UK ETS, this will increase investor uncertainty and will distort incentives provided by the existing, carbon market.

Chapter 3

Questions in this section relate to

- What existing, enhanced and new roles and functions we consider a Future System Operator is well placed to take on to drive the transition to net zero.

Question 8

Do you agree that the FSO should undertake all the existing roles and functions of NGESO?

A

☒ **Yes**

☐ **No**

B There is still potential for conflict of interest if the ESO is connected to the network owners and interconnectors and NG group shareholder interests. The ESO is a clearly defined role and the functions within the ESO work well together.

If not please explain why:

[Click here to enter text.](#)

Question 9

Do you agree there is a case for the FSO to undertake the gas strategic functions outlined in Option 1?

A

☒ Yes

☐ No

B Gas is an important part of GB's journey to Net Zero, but its role is likely to change with increasing decarbonisation of heat. The future of gas and strategic planning of electricity are fundamentally and intricately linked. Including responsibility for gas in the FSO will improve investor confidence in long term decision making. It should be recognised that the gas system operator will be very small when compared to the electricity system operator and it should have appropriate resources. There is a risk that the gas system operator's recommendations will not be given appropriate weight within the FSO. There will need to be clear transparency between the recommendations of the different parts of the FSO. If the gas side of the FSO cannot be given the appropriate level of attention and weight then it may be more appropriate to keep the functions of the gas SO separate from the FSO framework to ensure that sufficient focus is given to gas in the planning process. Needless to say, if a separate gas SO is maintained it will need to work closely with the FSO and the FSO itself will need to ensure it has significant knowledge of the gas system.

If not please explain why:

[Click here to enter text.](#)

Question 10

Do you agree that there is not currently a case for the FSO to undertake all GSO roles and functions, including real time gas system operation, as outlined in Option 2?

A

☐ Yes

☒ No

B

If not please explain why:

In general, we agree with Option 1. Roles such as emergency procedures, connections and outage management can remain with the network owner. However, we believe balancing and operation of the system, such as short-term forecasting and Winter/Summer outlooks, should be part of the FSO, as they will be inherently linked to the electricity equivalents. Commercial markets respond to signals from both.

Whichever option is pursued, there will need to be clear and transparent communications between the FSO and the real time operation to ensure any potential opportunities are not lost.

Chapter 3- New and enhance FSO roles

Questions in this section relate to

- 3.2 in the FSO Consultation

Question 11

Do you have views on the proposal for an advisory role? What organisations do you consider would benefit from the provision of advice by the FSO?

Please provide your answer below

We agree that the FSO could provide a strong advisory position on a number of areas, including expanding the current Future Energy Scenarios. There may still be potential for conflict of interest. For example, the FSO may choose to highlight scenarios or solutions that make their role easier or cheaper for the FSO. It is vital that the authorities being advised are able to understand and interrogate the FSO to be sure any advice is independent and comprehensive. For bodies like the CCC, Ofgem should play a supervisory role, rather than letting the FSO behave unilaterally.

Who should bear the costs of providing that advice?

If the FSO is essentially acting as a consultant, that is, providing analysis and advice on a topic that is not in their BAU remit, then they should be considered as a consultant. In that case, one would expect the party who asked for advice from the FSO to bear the cost. However, given the FSO is likely to be in a unique position (access to information and knowledge that a commercial consultant cannot have), these costs should be as directly cost reflective as possible, so that the FSO cannot use them as a revenue source. In most cases, the cost will be socialised (if borne directly by the FSO or paid for by Ofgem/Government) and therefore should be minimised to help ensure consumers are getting value for money.

If such advice is considered to be BAU (e.g. the information is already collected and published, the FSO provide commentary or interpretation), or becomes a recurring task, then it should be built into the FSO's role and budget accordingly.

Question 12

Do you have any views on the other areas where we are considering new and enhanced roles and functions for the FSO (outlined in section 3.2)?

Please elaborate:

As well as the details of particular potential future roles, it is important to note that all these roles will need to be monitored, regulated and understood by Ofgem. That will require technical expertise and more resource from the Authority. The importance of competent oversight grows as the FSO's roles expand and they, as an industry party, become more powerful. It is not clear that Ofgem will be able to fulfil their obligations in relationship to a larger FSO.

We believe Dispute Resolution should remain with Ofgem. Where disputes involve interpretations of licence conditions, code requirements etc, the FSO is not qualified to define a "correct" definition. Where disputes involve industry guidelines, it is likely that the FSO will have written those guidelines so cannot be considered impartial. Likewise with any disputes that involve finances going to or through the FSO. There is also the potential for dispute resolution to distract from the FSO's core responsibilities.

With suitable consultation, we believe the FSO could well take on a role around long term system planning and network development, although we are concerned as to the extra cost this would entail. It is harder to place a value on work that is more research or speculative, and thus harder to judge whether consumers have received value for money. This long-term planning should be clearly separated from the price of carbon, as the carbon market is already ensuring the cost of carbon is internalised in decision making and dispatch. The FSO should not make recommendations or decisions on which technologies are appropriate for Net Zero. If the FSO starts to "pick winners" this would distort the market and undermine the market based price incentive delivered by the carbon market. The FSO must not create barriers to investment based on carbon; the UK ETS and carbon price are already considered as a key part of any investment case.

Ancillary markets, such as reserve products, are currently under the ESO and we note that this process can vary in effectiveness, ranging from almost completely fully developed products being presented to industry to vague 'straw man' proposals that are technically

infeasible. The FSO must have a clear duty to market participants in developing new ancillary markets and products. They are a key part of balancing the system, so it is appropriate they remain with the FSO although under strict supervision.

Wider market design, such as the capacity market, should not be within the remit of the FSO. Large, high value, high impact markets require specialised economic knowledge and there is no evidence to suggest the FSO will have that.

We believe that the FSO is best placed to co-ordinate with DNOs, although taking on DSO functions themselves may create new conflicts of interest, with the risk of DNOs being differentiated unduly due to transmission level concerns. DNOs should be obligated to share appropriate data, otherwise the FSO will be unable to take a whole-network view.

It is too early to have state whether we would support the FSO being involved in local energy planning, but we would note that a number of Local Authorities have net zero plans and ambitions. Some are more obviously political than others and the scope varies (dedicated wildflower areas, low emission vehicles zones, subsidised local renewables, changes to planning regimes etc) and if the FSO is to act in this area, it will need to be suitably prepared. It may open the FSO up to inappropriate political influence, or vice versa: the FSO could be accused of frustrating local plans.

Chapter 4

Questions in this section relate to

Organisation Design

- The high-level characteristics and detailed attributes which we consider are needed to achieve this, and seeks views on two different organisational models and the extent to which they meet these characteristics and attributes.

Question 13

What are your views on our proposed characteristics and attributes of a future system operator and how the models presented would deliver against them?

Please provide your answer below

Given the wide scope of the FSO, as already described, it is vital that the FSO has the technical expertise and depth of understanding to avoid inefficiencies and be able to mitigate/prepare for unintended consequences.

It is hard to see how a privately owned model could be truly independent and technically capable, as this would require a company with no current energy sector interests to come forward, or to be willing to divest any current interests completely. It does present an opportunity for disrupters to enter the industry, which may be needed.

It is hard to see how a non-profit model could be suitably incentivised and may open the FSO to undue political influence, creating instability as political focus shifts.

Are there other characteristics or attribute that we have not yet considered?

The FSO must understand the need for investment certainty and publicly owned model may not have that, whereas a private corporation should. There is also a greater transparency risk with a publicly owned FSO, as private companies are obliged to publish information with Companies House. This can be mitigated with careful licensing.

Question 14

Are we considering the right organisation models for the FSO? And why?

Please provide your answer below

Both models have advantages and disadvantages. For a privately owned model, there is still a risk of conflict of interest and a need to ensure financial resilience. It may take consider time to find and approve an appropriate buyer, during which time the industry is left uncertain and there is a risk that projects, plans and reforms are put on hold while we wait.

A publicly owned model may be open to political influence when a lasting, stable and secure regulatory framework is required to rebuild investor confidence. This model may be quicker to implement but will require compensation to the existing owner. There is also potentially a greater risk of losing technical expertise as individuals are currently employed by a global company, although legally separate and regulated. The public model means they would be asked to become civil servants, with the implied different career prospective.

Question 15

Are we considering the right elements for the FSO's regulatory and accountability frameworks? And why?

Please provide your answer below

Yes, although it is worth noting there has been no SPS designated, so that should not be relied upon as a method of regulatory control. We would also require more information on how the FSO is accountable to Ofgem, including how the various duties are monitored and what would be the implications of failing to meet expected standards. We also believe a clear path to the CMA should be outlined as a last resort.

Question 16

Do you have views on the level of shareholding or control involving other 'energy interests' and the FSO at which a conflict of interest would become a concern?

Please provide your answer below

FSO employees, as well as the FSO, should be free from other energy interests or have to declare any shareholdings or other interests. This information should be made public in a suitable anonymised form.

Question 17

Are we considering the right implications of our proposals for Elexon and Xoserve?

Please provide your answer below

Yes. Elexon and Xoserve should continue to operate independently and be allowed to focus on their key roles.

Chapter 5

Questions in this section relate to

Implementation

- A preferred high-level approach for implementation of the FSO with the aim of seeking views on how the FSO can best implemented in practice

Question 18

What is your view on the preferred implementation approach?

Please explain why

We generally support the preferred implementation approach although it is alarming that there are no timelines discussed. Whilst we understand changes to primary legislation take time, the speed of transfer of roles from the existing ESO to the FSO is key. The scope of the FSO is larger than the existing ESO and gas roles, so careful thought should be given into how to attract and integrate new staff and teams without diluting the expertise gained from the ESO.

We are also concerned that improvements currently in progress or ongoing projects being undertaken by the ESO may be delayed or deprioritised during transition.

Question 19

Based on the areas where we are considering new and enhanced roles and functions for the FSO, which of these should be prioritised for development?

Please explain why

Some roles will be easier to transfer than others (for instance, long-term forecasting and be paused to transfer with little immediate impact) and so these should be prioritised in order to gain practical experience. Other roles and teams that are fundamentally linked should be transferred together and these should be identified before the transition period starts.

For the new roles, there should be clear consultation on the exact scope, so industry understands, before they are implemented. Once the scope and nature of these new roles is fixed, it will be easier to prioritise.

Question 20

What do you believe are the risks to implementation?

Please provide your answer below

The major risk is that reforms and changes that are needed now are put on hold while the FSO is developed, both for the ESO as gas operator, but also industry. Without a clear view of the FSO and when it will be in operation, there is no industry framework for investors to judge future viability. There is a real risk of stranded assets if the FSO is implemented quickly and changes the industry too fast.

Again, this risk feeds directly into investor confidence. A lack of clarity of FSO roles and outlook will be detrimental to investment in the industry. However, SO reform does present a great opportunity; if designed correctly the FSO could demonstrate clear 'whole system' regulatory design for the long term future.

It is likely, however, that primary legalisation and/or the sale of the relevant parts of National Grid will take longer than anticipated, possibly becoming politicised, meaning industry, the ESO and the gas operator could be limbo and limited to keeping the status quo. Then, when the FSO is fully implemented, they and the industry could face significant pressure to 'catch-up' the lost years in order to reach Net Zero by 2050.

If implementation takes too long, costs will increase dramatically and there is risk of duplication of roles between the ESO and the new FSO. As well as inefficient, costly and confusing to industry, this also could create legal implications.

How can these be mitigated?

BEIS and Ofgem must develop the plans as completely as possible, with the ESO encouraged to structure itself similarly to the FSO before transition period.

Question 21

Do you have any comments on potential implications of implementation for you, your organisation, or other stakeholders?

Please provide your answer below

We will need to dedicate time and resources to this change, in order to understand and work well with the new FSO. There may also be legal implications as we have a number of commercial and non-commercial contracts in place with National Grid, as ESO as well as other areas. It seems likely these will need to be revaluated and any changes will create uncertainty. There will need to be suitable due diligence but we do not anticipate having to renegotiate or sign materially new agreements.

Chapter 6

Questions in this section relate to

Impact assessment

- FSO Impact assessment which is presented alongside this consultation to assess the likely costs, benefits and distributional impacts of the policy options considered

Question 22

What is your view on the position there are likely to be cost savings across the energy system from an increased “whole system” view, as described in paragraphs 50-55 of the IA?

A

Please provide your answer below

We believe that a whole system view will present cost savings, but they will be hard to quantify, especially as there will be costs involved with reaching Net Zero. A whole system view, with the potential to fully utilise synergies between markets should reduce this cost.

B

If so, is the potential magnitude of savings illustrated fairly in the IA?

[Click here to enter text.](#)

C

If not, why not?

[Click here to enter text.](#)

Question 23

What is your view on the conclusion that policy intervention is likely to increase the benefits of onshore electricity network competition, as described in paragraphs 53-59 of the IA? If you agree, is the potential magnitude of savings illustrated fairly in the IA? If not, why not?

A

Please provide your answer below

Removing conflicts of interest should result in a fairer competition system and thus better value for the consumer. However, competition within onshore networks is still under development, so it is difficult to state with certainty whether we believe there will be an improvement.

B

If not, why not?

There will need to be suitable transparency in the tendering process to avoid systemic bias and competition may be a slower option than direct investment, thus diluting the consumer benefit.

Question 24

Do you think that the impact assessment has identified and considered the key costs and benefits of policy intervention?

A

☐ **Yes**

☐ **No**

B

If not, can you provide details on other impacts that have not been considered?

[Click here to enter text.](#)

Question 25

Do you think that the distribution of impacts is fairly represented, with impacted groups correctly identified? Outlined in table 5 of the IA.

A

☐ **Yes**

☐ **No**

B

If not, why not?

[Click here to enter text.](#)

Question 26

We invite respondents' views on whether the proposals for energy system governance reform may have a different impact on people who have a protected characteristic (age, disability, gender re-assignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex (gender) or sexual orientation), in different ways from people who don't have that characteristic.

Please provide any evidence that may be useful to assist with our analysis of policy impacts.

[Click here to enter text.](#)

Do you have any other comments that might aid the consultation process as a whole?

Please use this space for any general comments that you may have, comments on the layout of this consultation would also be welcomed.

[Click here to enter text.](#)

Thank you for your views on this consultation.

Thank you for taking the time to let us have your views. We do not intend to acknowledge receipt of individual responses unless you tick the box below.

Please acknowledge this reply ☒

At BEIS we carry out our research on many different topics and consultations, and your views are valuable to us. Would you be happy for us to contact you again from time to time either for research or about other consultations?

☒ Yes

☐ No